using recombinant DNA technology has provided a set of genetic tools by Behavioral and biochemical responses mediating ethanol's actions have treatments. These techniques are reviewed, and their potential applications polygenic nature. Recent progress in the creation of new animal models mutant mice, as well as manipulation of protein synthesis with antisense been difficult to study in humans and animals because of their complex examined. These techniques include the creation of transgenic and null which the role of specific candidate genes in ethanol's actions can be \$0.23 Estimated total session cost 0.062 DialUnits 10jul00 06:54:56 User208669 Session D1651.1 \$0.22 0.062 DialUnits File1 \$0.23 Estimated cost this search \$0.22 Estimated cost File1

\$0.01 TYMNET

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Set Items Description

DIALOG(R)File 155:MEDLINE(R)

to alcohol research are discussed. (79 Refs.)

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08183377 94269635

Forward and reverse genetic approaches to behavior in the mouse [see comments

Takahashi JS; Pinto LH; Vitaterna MH

Department of Neurobiology and Physiology, Northwestern University,

Evanston, IL 60208.

Science (UNITED STATES) Jun 17 1994, 264 (5166) p1724-33, ISSN 0036-8075 Journal Code: UJ7

Contract/Grant No.: EY08467, EY, NEI; MH39592, MH, NIMH; MH49241, MH,

Comment in Science 1995 Jan 6;267(5194):17

Languages: ENGLISH

Document type: JOURNAL ARTICLE; REVIEW; REVIEW, TUTORIAL

with high-efficiency mutagenesis in the mouse can uncover unknown genes and Modern molecular genetic and genomic approaches are revolutionizing the study of behavior in the mouse. "Reverse genetics" (from gene to phenotype) the mouse. Together, these approaches perruit a molecular analysis of both the recent availability of high-density genetic maps and physical mapping has been used to isolate a behavioral mutant of the circadian system. With learning in mice. In addition, "forward genetics" (from phenotype to gene) with targeted gene transfer provides a powerful tool to dissect behavior resources, positional cloning of virtually any mutation is now feasible in genes implicated in the regulation of long-term potentiation and spatial and has been used successfully to study the effects of null mutations in known and previously unknown genes regulating behavior. (161 Refs.) ?ts10/7/7

10/7/7

DIALOG(R)File 155:MEDLINE(R)

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38993752 97276296

Human cytomegalovirus glycoproteins.

Britt WJ; Mach M

Department of Pediatrics, University of Alabama at Birmingham 35233, USA.

742707 DT=REVIEW? 979865 GENETIC? Items Description

10977 NULL

295 S1 AND S2 AND S3

27950 CODON OR CODONS

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1595094 TECHNIQUES OR METHODS

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229 S15 AND S13 S15 160155 S9/TI

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**JIALOG(R)File 155:MEDLINE(R)** 

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38445644 96026591

Use of transgenics, null mutants, and antisense approaches to study ethanol's actions.

Wehner JM; Bowers BJ

Alcoholism, clinical and experimental research (UNITED STATES) Aug 1995 School of Pharmacy, University of Colorado, Boulder 80309, USA. 19 (4) p811-20, ISSN 0145-6008 Journal Code: 35X

Contract/Grant No.: AA-03527, AA, NIAAA; AA-00141, AA, NIAAA

Languages: ENGLISH

Document type: JOURNAL ARTICLE; REVIEW; REVIEW, TUTORIAL

7 b 155

Methods in molecular biology (UNITED STATES) 1995, 39 p203-24, ISSN Intervirology (SWITZERLAND) 1996, 39 (5-6) p401-12, ISSN 0300-5526 This experimental goal has been hindered by the large genome of HCMV, which The complex biology of human cytomegalovirus (HCMV) necessarily begins may encode over 65 unique glycoproteins. Protein homologs of only 4 herpes simplex virus (HSV) glycoproteins, gB, gH, gL and gM, have been identified, component of host immunity and represents a goal of vaccine development. glycoproteins may contribute to evasion of host cellular immune responses Document type: JOURNAL ARTICLE; REVIEW; REVIEW, TUTORIAL Document type: JOURNAL ARTICLE; REVIEW; REVIEW, TUTORIAL glycoproteins elicit strong host immune responses, including the production Animal Cell Culture Group, Biotechnology Research Institute, Montreal, glycoprotein null mutants of HSV and other herpesviruses. Additional envelope as well as their expression in the membranes of the infected cell. and potential functions have been postulated based on studies of specific Finally, recent findings have also provided evidence that HCMV Scale-up of recombinant virus and protein production in stirred-tank require a further analysis of the glycoprotein components of the virion with an initial interaction between the envelope of the infectious virion glycoproteins have been analyzed but to date their function in the replicative cycle of this virus is unknown. Several of the envelope and the host cell. Understanding the initial events of infection will of virus-neutralizing antibodies. This response is felt to be a key (c) format only 2000 Dialog Corporation. All rts. reserv. 10jul00 07:06:51 User208669 Session D1651.2 by limiting viral antigen presentation. (97 Refs.) Tom RL; Caron AW; Massie B; Kamen AA \$0.00 219 Type(s) in Format 6 **\$8.52** 2.661 DialUnits File155 \$0.80 4 Type(s) in Format 7 DIALOG(R)File 155:MEDLINE(R) \$9.92 Estimated cost this search \$9.32 Estimated cost File155 064-3745 Journal Code: BU3 \$0.80 223 Types Languages: ENGLISH Languages: ENGLISH 08545193 95345936 \$0.60 TYMNET ournal Code: GW7 Quebec, Canada. 7 t s 16/7/90 (26 Refs.) eactors.

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Journal of molecular biology (ENGLAND) Sep 16 1994, 242 (2) p130-8,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Structure-function relationship between tobacco mosaic virus coat protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             would predictably interfere with interface regions located between adjacent
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           were created throughout the known structure of the TMV coat protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    aggregates demonstrated HR-eliciting coat proteins to have reduced
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 protein affect the elicitation of the N' gene hypersensitive response (HR)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Alterations in the structure of the tobacco mosaic virus (TMV) coat
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Center for Agriculture Biotechnology, University of Maryland
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               result in the elicitation of the HR were either conservative or located
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            in Nicotiana sylvestris. To investigate this structure-function
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aggregate stability in comparison with non-HR-eliciting coat proteins and a proposed, in which disassembly of coat protein aggregates exposes a host inding corresponded with the predicted structural effects of HR-eliciting correlation existed between the strength of the elicited HR and the ability nost cell recognition and HR elicitation. A model for HR elicitation is protein tertiary structure were found to prevent HR elicitation. These of a substitution to interfere with ordered aggregate formation. This substitutions. Radical substitutions that predictably disrupted coat of coat protein quaternary structure but not tertiary structure lead to indings demonstrate that structural alterations that affect the stability receptor" binding site.

DIALOG(R)File 155:MEDLINE(R)

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)5624622 90085828

eaction but not required for the development of mosaic symptoms in Tobacco mosaic virus coat protein: an elicitor of the hypersensitive Nicotiana sylvestris.

Culver JN; Dawson WO

Department of Plant Pathology, University of California, Riverside 92521. Virology (UNITED STATES) Dec 1989, 173 (2) p755-8, ISSN 0042-6822

lournal Code: XEA

Languages: ENGLISH

Document type: JOURNAL ARTICLE

removed from full-length cDNA clones of the HR-inducing mutant TMV 25 and These free-RNA mutants moved poorly out of inoculated leaves and produced a RNA, from both mutants, was recovered from inoculated and systemic mosaic revealed the presence of TMV-encoded 126-kDa protein and the absence of systemic mosaic symptom 9 to 12 weeks after inoculation. Infectious viral eaves. Western blot analysis of both inoculated and noninoculated leaves protein of TMV 25 is an elicitor molecule responsible for the induction of HR in N. sylvestris and that the TMV coat protein is not required for the Specific nucleotide changes in the coat protein gene of tobacco mosaic virus (TMV) have been identified as responsible for the induction of the protein. To determine if the altered viral RNA or the altered protein acted he systemically infecting TMV U1 strain. Infectious transcripts of these altered genomes failed to induce HR in inoculated leaves of N. sylvestris. coat protein for both mutants. This study demonstrates that the coat hypersensitive reaction (FIR) in Nicotiana sylvestris. Each of these nucleotide changes resulted in amino acid substitutions in the coat directly to elicit the HR, the coat protein translational starts were development of systemic mosaic symptoms.

10jul00 08:58:23 User208669 Session D1652.2

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\$1.55 Estimated cost this search

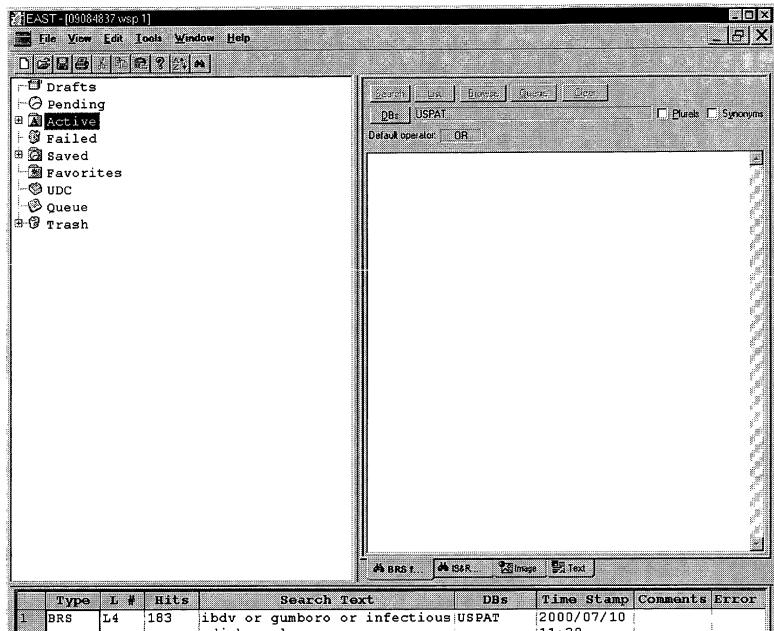
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BRS	L6	53	ipnv or pancreatic adj necrosis	USPAT	2000/07/10		<u> </u>
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